

**FEE TRANSMITTAL FOR FY 2005**

Effective on 12/08/2004. Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

TOTAL AMOUNT OF PAYMENT (\$) 500.00

## Complete if Known:

Application No. 10/021,228  
Filing Date 12/11/01  
First Named Inventor Tsukagoshi  
Examiner Name G. Philippe  
Art Unit 2621  
Attorney Docket No. 80398.P464

Applicant claims small entity status. See 37 CFR 1.27.

## METHOD OF PAYMENT (check all that apply)

☒ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify)

## Deposit Account

Deposit Account Number : 02-2666

Deposit Account Name: \_\_\_\_\_

☒ The Director is Authorized to do the following with respect to the above-identified Deposit Account:

☐ Charge fee(s) indicated below.

☒ Charge any additional fee(s) or underpayment of fee(s) during the pendency of this application.

☐ Charge fee(s) indicated below except for the filing fee

☒ Credit any overpayments.

☒ Any concurrent or future reply that requires a petition for extension of time should be treated as incorporating an appropriate petition for extension of time and all required fees should be charged.

Warning: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

## FEE CALCULATION

## 1. BASIC FILING, SEARCH, AND EXAMINATION FEES

| Large Entity             |          | Small Entity |          | Fee Description                    |           | Fees Paid (\$) |
|--------------------------|----------|--------------|----------|------------------------------------|-----------|----------------|
| Fee Code                 | Fee (\$) | Fee Code     | Fee (\$) |                                    |           |                |
| 1011                     | 300      | 2011         | 150      | Utility application filing fee     | 1,000/500 | _____          |
| 1111                     | 500      | 2111         | 250      | Utility search fee                 |           | _____          |
| 1311                     | 200      | 2311         | 100      | Utility examination fee            |           | _____          |
| 1012                     | 200      | 2012         | 100      | Design application filing fee      | 430/215   | _____          |
| 1112                     | 100      | 2112         | 50       | Design search fee                  |           | _____          |
| 1312                     | 130      | 2312         | 65       | Design examination fee             |           | _____          |
| 1013                     | 200      | 2013         | 100      | Plant filing fee                   | 660/330   | _____          |
| 1113                     | 300      | 2113         | 150      | Plant search fee                   |           | _____          |
| 1313                     | 160      | 2313         | 80       | Plant examination fee              |           | _____          |
| 1004                     | 300      | 2004         | 150      | Reissue filing fee                 | 1,400/700 | _____          |
| 1114                     | 500      | 2114         | 250      | Reissue search fee                 |           | _____          |
| 1314                     | 600      | 2314         | 300      | Reissue examination fee            |           | _____          |
| 1005                     | 200      | 2005         | 100      | Provisional application filing fee |           | _____          |
| SUBTOTAL (1) \$ <u>0</u> |          |              |          |                                    |           |                |

**2. EXCESS CLAIM FEES**

|   | <u>Extra Claims</u> | <u>Fee from below</u> | <u>Fees Paid (\$)</u> |
|---|---------------------|-----------------------|-----------------------|
| <b>Total Claims</b> _____ - 20 or HP = _____                          |                     | X _____               | = _____               |
| HP = highest number of total claims paid for, if greater than 20      |                     |                       |                       |
| <b>Independent Claims</b> _____ - 3 or HP = _____                     |                     | X _____               | = _____               |
| HP = highest number of independent claims paid for, if greater than 3 |                     |                       |                       |
| <b>Multiple Dependent Claims</b>                                      |                     | _____                 | = _____               |

| <u>Large Entity</u> |          | <u>Small Entity</u> |          |  |
|---------------------|----------|---------------------|----------|--|
| Fee Code            | Fee (\$) | Fee Code            | Fee (\$) | <u>Fee Description</u>   |
| 1202                | 50       | 2202                | 25       | Each claim over 20   |
| 1201                | 200      | 2201                | 100      | Each independent claim over 3                                    |
| 1203                | 360      | 2203                | 180      | Multiple dependent claims, if not paid                           |
| 1204                | 200      | 2204                | 100      | Reissue: each claim over 20 and more than in the original patent |
| 1205                | 50       | 2205                | 25       | Reissue: each independent claim more than in the original patent |

SUBTOTAL (2) \$ \_\_\_\_\_ 0

**3. APPLICATION SIZE FEE**

If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

| <u>Total Sheets</u> | <u>Extra Sheets</u> | <u>Number of each add'l<br/>50 or fraction thereof</u> | <u>Fee from below</u> | <u>Fees paid (\$)</u> |
|---------------------|---------------------|--|-----------------------|-----------------------|
| _____               | - 100 = _____       | / 50 = _____ (round up to whole number)                | X _____               | _____                 |

| <u>Large Entity</u> |          | <u>Small Entity</u> |          |  |
|---------------------|----------|---------------------|----------|--|
| Fee Code            | Fee (\$) | Fee Code            | Fee (\$) | <u>Fee Description: Application size fee for each additional group of 50 sheets beyond initial 100 sheets (count spec &amp; drawings except sequences &amp; program listings):</u> |
| 1081                | 250      | 2081                | 125      | Utility  |
| 1082                | 250      | 2082                | 125      | Design   |
| 1083                | 250      | 2083                | 125      | Plant  |
| 1084                | 250      | 2084                | 125      | Reissue  |

SUBTOTAL (3) \$ \_\_\_\_\_ 0

**FEE CALCULATION (continued)****4. OTHER FEE(S)**

|   |          |                     |          |  | <u>Fees Paid (\$)</u> |
|---|----------|---------------------|----------|--|-----------------------|
| Non-English Specification, \$130 fee (no small entity discount) |          |                     |          |  |                       |
| <u>Large Entity</u>   |          | <u>Small Entity</u> |          | <u>Fee Description</u>   |                       |
| Code  | Fee (\$) | Code                | Fee (\$) |  |                       |
| 1051  | 130      | 2051                | 65       | Surcharge - late filing fee or oath  |                       |
| 1052  | 50       | 2052                | 25       | Surcharge - late provisional filing fee or cover sheet                     |                       |
| 1053  | 130      | 1053                | 130      | Non-English specification  |                       |
| 1812  | 2,520    | 1812                | 2,520    | For filing a request for ex parte reexamination                            |                       |
| 1813  | 8,800    | 1813                | 8,800    | Request for inter parties reexamination                                    |                       |
| 1804  | 920*     | 1804                | 920*     | Requesting publication of SIR prior to Examiner action                     |                       |
| 1805  | 1,840*   | 1805                | 1,840*   | Requesting publication of SIR after Examiner action                        |                       |
| 1251  | 120      | 2251                | 60       | Extension for reply within first month                                     |                       |
| 1252  | 450      | 2252                | 225      | Extension for reply within second month                                    |                       |
| 1253  | 1,020    | 2253                | 510      | Extension for reply within third month                                     |                       |
| 1254  | 1,590    | 2254                | 795      | Extension for reply within fourth month                                    |                       |
| 1255  | 2,160    | 2255                | 1,080    | Extension for reply within fifth month                                     |                       |
| 1401  | 500      | 2401                | 250      | Notice of Appeal   |                       |
| 1402  | 500      | 2402                | 250      | Filing a brief in support of an appeal                                     | 500.00                |
| 1403  | 1,000    | 2403                | 500      | Request for oral hearing   |                       |
| 1451  | 1,510    | 1451                | 1,510    | Petition to institute a public use proceeding                              |                       |
| 1452  | 500      | 2452                | 250      | Petition to revive - unavoidable   |                       |
| 1453  | 1,500    | 2453                | 750      | Petition to revive - unintentional   |                       |
| 1501  | 1,400    | 2501                | 700      | Utility issue fee (or reissue)   |                       |
| 1502  | 800      | 2502                | 400      | Design issue fee   |                       |
| 1503  | 1100     | 2503                | 550      | Plant issue fee  |                       |
| 1462  | 400      | 1462                | 400      | Petitions to the Commissioner (CFR 1.17(f) Group I)                        |                       |
| 1463  | 200      | 1463                | 200      | Petitions to the Commissioner (CFR 1.17(g) Group II)                       |                       |
| 1464  | 130      | 1464                | 130      | Petitions to the Commissioner (CFR 1.17(h) Group III)                      |                       |
| 1807  | 50       | 1807                | 50       | Processing fee under 37 CFR 1.17(q)  |                       |
| 1806  | 180      | 1806                | 180      | Submission of Information Disclosure Stmt                                  |                       |
| 8021  | 40       | 8021                | 40       | Recording each patent assignment per property (times number of properties) |                       |
| 1809  | 790      | 2809                | 395      | For filing a submission after final rejection (see 37 CFR 1.129(a))        |                       |
| 1814  | 130      | 2814                | 65       | Statutory Disclaimer   |                       |
| 1810  | 790      | 2810                | 395      | For each additional invention to be examined (see 37 CFR 1.129(b))         |                       |
| 1801  | 790      | 2801                | 395      | Request for Continued Examination (RCE)                                    |                       |
| 1802  | 900      | 1802                | 900      | Request for expedited examination of a design application                  |                       |
| 1504  | 300      | 1504                | 300      | Publication fee for early, voluntary, or normal pub.                       |                       |
| 1505  | 300      | 1505                | 300      | Publication fee for republication  |                       |
| 1803  | 130      | 1803                | 130      | Request for voluntary publication or republication                         |                       |
| 1808  | 130      | 1808                | 130      | Processing fee under 37 CFR 1.17(i) (except provisionals)                  |                       |
| 1454  | 1,370    | 1454                | 1,370    | Acceptance of unintentionally delayed claim for priority                   |                       |
| Other fee (specify) _____                                       |          |                     |          |  |                       |
| Other fee (specify) _____                                       |          |                     |          |  |                       |
| <b>SUBTOTAL (4)</b>   |          |                     |          |  | <b>\$ 500.00</b>      |

\*Reduced by Basic Filing Fee Paid

**SUBMITTED BY:**Typed or Printed Name: Eric S. ReplogleSignature: Date: Nov. 20, 2006Reg. Number: 52,161Telephone Number: 408-720-8300

Send to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

|                            |   |                         |
|----------------------------|---|-------------------------|
| In re Application of:      | ) | Examiner: Phillippe, G. |
|                            | ) |                         |
| Tsukagoshi, et al.         | ) | Art Unit: 2621          |
|                            | ) |                         |
| Application No. 10/021,228 | ) | Confirm. No: 1136       |
|                            | ) |                         |
| Filed: December 11, 2001   | ) |                         |
|                            | ) |                         |
| For: A VIDEO DECODER AND   | ) |                         |
| METHOD FOR USING THE       | ) |                         |
| SAME                       | ) |                         |

Mail Stop Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**CERTIFICATE OF FIRST-CLASS MAILING**  
I hereby certify that this correspondence is being deposited with United States Postal Service as first class mail with sufficient postage in an envelope addressed to Mail Stop Appeal Brief- Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450  
On November 20, 2006

Date of Deposit

By: Dianne Neathery  
Dianne Neathery

**APPEAL BRIEF UNDER 37 C.F.R. § 41.37**

This is an appeal to the Board of Patent Appeals and Interferences from the decision of the Examiner of Group 2613, mailed June 20, 2006, in which claims 1-34 in the above-identified application were rejected in a final action. This Appeal Brief is hereby submitted pursuant to 37 C.F.R. § 41.37(a).

**I. REAL PARTY IN INTEREST**

The real parties in interest are the assignees of the full interest in the invention: Sony Electronics, Inc., Park Ridge, New Jersey, and Sony Corporation, Tokyo, Japan.

**II. RELATED APPEALS AND INTERFERENCES**

To the best of Appellant's knowledge, there are no appeals or interferences related to the present appeal that will directly affect, be directly affected by, or have a bearing on the Board's decision in the instant appeal.

### **III. STATUS OF THE CLAIMS**

Claims 1-34 are pending in the application and were finally rejected in an Office Action mailed June 20, 2006. Claims 1-34 are the subject of this appeal. A copy of Claims 1-34 as they stand on appeal are set forth in Appendix A.

### **IV. STATUS OF AMENDMENTS**

No amendments to the claims have been made after receipt of the Final Office Action.

### **V. SUMMARY OF CLAIMED SUBJECT MATTER**

Appellant's invention as claimed in claims 1-34 is directed to trimming selected frames of a video stream during decoding. In addition, claims 1-34 claim decoding only predetermined portions of each B frames, wherein the predetermined portions are determined by display resolution [Specification, Figure 2, paragraphs 0028-0030].

Independent claims 1 and 10 also claim receiving video stream that includes I, P, and B frame [Specification, Figure 1, paragraph 0024]. In addition, claims 1 and 10 also claim scaling only the predetermined portions of each B frames with vertical filtering [Specification, Figure 3, paragraphs 0030-0031].

Independent claim 9 and 15 also claim receiving a video stream and picture information [Specification, Figure 11, paragraph 0056]. In addition, claims 9 and 15 claim resetting a macro block counter [Specification, Figure 4, paragraph 0037]. Furthermore, claims 9 and 15 claim decoding of the predetermined portion of each B frames by vertical slice as determining picture size information [Specification, Figure 11, paragraph 0056]. The decoding of the predetermined portions of each vertical slice finds a vertical slice header code [Specification, Figure 3, paragraph 0031]. In addition, the decoding starts at a left end of the vertical slice and skips decoding until a macro block counter value is equivalent to the left most position of the vertical slice [Specification, Figure 11, paragraph 0057]. The decoding occurs until a macro block counter value is equal to the left most position of the vertical slice [Specification, Figure 11, paragraph 0057]. The decoding stops when the macro block counter value is the right most position

of the vertical slice [Specification, Figure 11, paragraph 0058]. Decoding is skipped when the macro block counter exceeds the right most position and until the macro block counter value reaches a right end of the vertical slice [Specification, Figure 11, paragraph 0058].

Independent claims 16 and 25 claim a video decoder comprising variable length and picture layer decoding units [Specification, Figure 4, paragraphs 0034-0042]. The variable length decoding unit receives a video stream and decodes symbols in the video stream [Specification, Figure 4, paragraphs 0035]. In addition, the variable length decoding unit includes a skip judge that instructs units within the video decoder to decode only predetermined portions of a B frame, with the predetermined portions of the B frame are determined by display resolution [Specification, Figure 4, paragraph 0040]. Furthermore, the picture layer decoding unit receives information from the variable length decoding unit and information from a system decoder [Specification, Figure 4, paragraph 0040].

Dependent claims 5 and 14 recite decoding the predetermined portion of each vertical slice by skipping the portion between the left end of the B frame and left most position of the vertical slice, decoding the portion between the left and right most positions of the vertical slice [Specification, Figure 11, paragraph 0058-0059]. Furthermore, claims 5 and 14 recite skipping a third portion between the right most position and the right end of the vertical slice [Specification, Figure 11, paragraph 0059].

Dependent claims 6, 17-20, and 26-33 claim that the picture size information is selected from a group consisting of inverse discrete cosine transform coefficients, motion vector information, macro block header information, or current macro block position information [Specification, Figure 4, paragraph 0036].

Dependent claims 8, 24, and 34 depend from independent claims 1, 16, and 26, and claim defines that the video stream is a MPEG-2 video stream [Specification, paragraph 0006].

## VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

- I. Claims 1-4 and 10-13 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Mochida, U.S. Patent No. 6,462,744.
- II. Claims 5, 9, 14 and 15 stand rejected under 35 U.S.C. § 103(a) as being obvious over Mochida in view of Reitmeier, U.S. Patent No. 4,622,577.
- III. Claims 16, 21, 22 and 25 stand rejected under 35 U.S.C. § 103(a) as being obvious over Mochida in view of Boyce, U.S. Patent No. 5,614,952.
- IV. Claims 6, 17-20, 23 and 26-33 stand rejected under 35 U.S.C. § 103(a) as being obvious over Mochida in view of Reitmeier and Boyce.
- V. Claims 8, 24 and 34 stand rejected under 35 U.S.C. § 103(a) as being obvious over Mochida in combination of the Examiner's Official Notice that MPEG-2 is well known.

## VII. ARGUMENTS

- I. Claims 1-4 and 10-13 are Patentable under 35 U.S.C. § 102(e) over Mochida et al.  
Claims 1-4 and 10-13 stand or fall together. Independent claim 1 is the representative claim.

Mochida discloses an onscreen data video display system that determines which portions of a B frame will be replaced by the location and size of the onscreen data, and discards those pre-determined portions before decoding the video. In addition, Mochida discloses that using B frames can degrade the video picture quality. Mochida also discloses that the remaining portions of the B frame are scaled using horizontal filters 71 and 72 (Figure 8). Vertical filter 73 receives the scaled output from horizontal filters 71-72 and filters between the video lines (Figure 8). However, Mochida does not teach or suggest that vertical filter 73 performs scaling.

Appellant respectfully submits that Mochida does not teach or suggest each and every element of claim 1. Claim 1 recites decoding only predetermined portions of each B frame of the video stream, with the predetermined portions determined by display resolution. In addition, claim 1 recites scaling the only predetermined portions of each B frame, with the scaling comprises vertical filtering. In contrast, Mochida's pre-

determined portions are determined by the picture quality. Furthermore, this section cited by the Examiner in support of his rejection merely discloses the effect the number of B frames has on the decoded picture quality. The cited section does not teach or suggest as disclosing Appellant's claimed predetermined portions determined by display resolution. Moreover, Appellant claims that vertical filtering is used to scale the pre-determined portions of the B frame. In contrast, Mochida discloses only using horizontal filtering to scale the pre-determined portions. Therefore, Mochida cannot be properly interpreted as disclosing Appellant's pre-determined portions or scaling comprising vertical filtering as claimed.

Therefore, Mochida cannot anticipate Appellant's claims 1-4 and 10-13 under 35 U.S.C. § 102(e).

II. Claims 5, 9, 14, and 15 are Patentable under 35 U.S.C. § 103(a) over Mochida in view of Reitmeier because the combination of these two references does not teach or suggest all elements in the claims, and there is no motivation to combine these two references.

Claims 5, 9, 14, and 15 stand of fall together. Independent claim 9 is the representative claim.

Reitmeier discloses decoding a multiplexed analog video stream. In particular, Reitmeier discloses displaying a wide aspect ratio analog video stream on a display capable of displaying picture a narrower aspect ratio.

Appellant's respectfully submit that the combination of Mochida and Reitmeier is improperly motivated because Mochida relates to decoding a digital video signal, whereas Reitmeier relates to extracting a picture from an analog video signal. As is well known in the art, digital and analog video are not equivalent signals. Therefore, one of skill in the art would not be motivated to combine Mochida with Reitmeier because each reference manipulates a different type of video input. Furthermore, one of the references would have to be modified to operate on the other type of video signal, thus rendering one of the references unsatisfactory for its intended purpose, which is improper (see MPEP 2143.01).



Moreover, independent claim 9 recites decoding predetermined portions of each B frame of the video stream, where the predetermined portions are determined by display resolution. Because Reitmeier is directed towards manipulating analog video and analog video does not contain B frames, Reitmeier cannot teach or suggest decoding only portions of B-frames determined by display resolution, or the scaling of the predetermined portions using vertical filtering as claimed.

Therefore, the combination of Mochida and Reitmeier cannot render obvious Appellant's claims 5, 9, 14, and 15 under 35 U.S.C. § 103(a).

III. Claims 16, 21, 22 and 25 are Patentable under 35 U.S.C. § 103(a) over Mochida in view of Boyce, because the combination of these two references does not teach or suggest all elements in the claims.

Claims 16, 21, 22, and 25 stand fall together. Independent claim 16 is the representative claim.

Boyce discloses decoding high-definition digital video stream into either a high-definition or standard definition video signal using two decoders. The first decoder produces the high definition video signal, while the second decoder produces the standard definition video signal using information generated by the first decoder. Furthermore, a preparer restricts the data rate of the video stream flowing into the variable length decoder (VLD) unit of the second decoder by discarding high frequency macroblock discrete cosine transform (DCT) coefficients.

Claim 16 recites decoding only portions of B-frames determined by display resolution. As per above, Mochida does not teach or suggest these claim limitations. Furthermore, Boyce is directed towards using two decoders to decode a high-definition digital video stream into two signals. Nonetheless, there is no disclosure in Boyce directed towards decoding portions of B-frames determined by display resolution as claimed.

Therefore, the combination of Mochida and Boyce cannot render obvious Appellant's claims 16, 21, 22, and 25 under 35 U.S.C. § 103(a).

IV. Claims 6, 17-20, 23 and 26-33 are Patentable under 35 U.S.C. § 103(a) over Mochida in view of Reitmeier and Boyce, because the combination of these three references does not teach or suggest all elements in the claims.

Claims 6, 17-20, 23, and 26-33 stand or fall together. Dependent claim 6 is the representative claim.

Claim 6 depends from independent claim 1. Independent claim 1 recites decoding only predetermined portions of each B frame of the video stream, where the predetermined portions determined by display resolution. As per above, none of Mochida, Boyce, or Reitmeier teach or suggest this claim element.

Therefore, the combination of Mochida, Boyce, and Reitmeier cannot render obvious Appellant's claims 6, 17-20, 23, and 26-33 under 35 U.S.C. § 103(a).

V. Claims 8, 24 and 34 are Patentable under 35 U.S.C. § 103(a) over Mochida in combination of the Examiner's Official Notice that MPEG-2 is well known because the combination of these two references does not teach or suggest all elements in the claims..

Claims 8, 24, and 34 stand and fall together. Dependent claim 8 is the representative claim.

Independent claim 1, from which claim 8 depends from, recites decoding only predetermined portions of each B frame of the video stream, where the predetermined portions determined by display resolution. As per above, Mochida does not teach or suggest this claim limitation. Furthermore, Examiner's Official Notice that MPEG-2 is well-known cannot fill the gap.

Therefore, the combination of Mochida and the Examiner's Official Notice cannot render obvious Appellant's claims 8, 24, and 34 under 35 U.S.C. § 103(a).

## VIII. CONCLUSION

Appellant's claims 1-4 and 10-13 are patentable because Mochida does not teach or suggest all limitations in the claims. Appellant's claims 5, 9, 14, and 15 are patentable

because the combination of Mochida and Reitmeier do not teach or suggest all the limitations in the claims. Appellant's claims 16, 21, 22, and 25 are patentable because the combination of Mochida and Boyce do not teach or suggest all the limitations in the claims. Appellant's claims 6, 17-20, 23, and 26-33 are patentable because the combination of Mochida, Reitmeier, and Boyce do not teach or suggest all the limitations in the claims. Appellant's claims 8, 24, and 34 are patentable because the combination of Mochida and Examiner's Official Notice do not teach or suggest all the limitations in the claims. Accordingly, Appellant respectfully requests the Board reverse the rejections of claims 1-4 and 10-13 under 35 U.S.C. § 102(e), claims 5-9 and 14-34 under 35 U.S.C. § 103(a), and direct the Examiner to enter a Notice of Allowance for claims 1-34.

**Fee for Filing a Brief in Support of Appeal**

Enclosed is a check in the amount of \$500.00 to cover the fee for filing a brief in support of an appeal as required under 37 C.F.R. §§ 1.17(c) and 41.37(a).

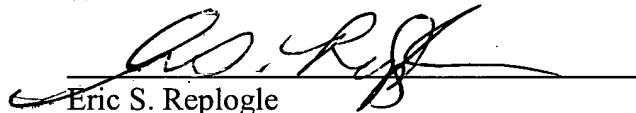
**Deposit Account Authorization**

Authorization is hereby given to charge our Deposit Account No. 02-2666 for any charges that may be due. Furthermore, if an extension is required, then Appellant hereby requests such extension.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR  
& ZAFMAN LLP

Dated: November 20, 2006

  
Eric S. Replogle  
Agent for Appellant  
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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**



|                            |   |              |               |
|----------------------------|---|--------------|---------------|
| In re Application of:      | ) | Examiner:    | Phillippe, G. |
|                            | ) |              |               |
| Tsukagoshi, et al.         | ) | Art Unit:    | 2621          |
|                            | ) |              |               |
| Application No. 10/021,228 | ) | Confirm. No: | 1136          |
|                            | ) |              |               |
| Filed: December 11, 2001   | ) |              |               |
|                            | ) |              |               |
| For: A VIDEO DECODER AND   | ) |              |               |
| METHOD FOR USING THE       | ) |              |               |
| SAME                       | ) |              |               |

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Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**CLAIMS APPENDIX FOR  
APPELLANT'S BRIEF UNDER 37 C.F.R. 41.37(a)**

1. (Previously Presented) A method of trimming selected frames of a video stream during decoding comprising:
  - receiving the video stream including I, P, and B frames;
  - decoding only predetermined portions of each B frame of the video stream, the predetermined portions determined by display resolution; and
  - scaling the only predetermined portions of each B frame, the scaling comprises vertical filtering.
2. (Original) The method of claim 1 wherein the predetermined portions comprises portions to be displayed.
3. (Original) The method of claim 1 further comprising:
  - storing the decoded portions of B frame data; and

fully decoding an I frame and a P frame of the video stream.

4. (Original) The method of claim 1 wherein decoding only predetermined portions of each B frame of the video stream comprises decoding the predetermined portions of each B frame by vertical slice.

5. (Original) The method of claim 4 wherein decoding the predetermined portions of each B frame by vertical slice comprises:

determining picture size information including a left end, a left most position, a right most position, and a right end; and

decoding predetermined portions of each vertical slice, wherein decoding predetermined portions of each vertical slice comprises:

skipping a first portion between the left end and the left most position for the vertical slice; and

decoding a second portion between the left most position and the right most position for the vertical slice; and

skipping a third portion between the right most position and the right end.

6. (Original) The method of claim 5 wherein the picture size information is selected from the group consisting of inverse discrete cosine transform (IDCT) coefficients, motion vector information, macro block header information, or current macro block position information.

7. (Original) The method of claim 6 further comprising:

performing an inverse discrete cosine transform (IDCT) on the decoded portions of the B frame; and

adding an output of the IDCT with data in a spatially shifted location in an anchor frame as instructed by the motion vector information.

8. (Original) The method of claim 1 wherein the video stream is a MPEG2 video stream.

9. (Previously Presented) A method of trimming a B frame of a video stream during decoding comprising:

- receiving the video stream and picture information;

- resetting a macro block counter; and

- decoding the predetermined portions of the B frame by vertical slice, the predetermined portions determined by display resolution, wherein decoding the predetermined portions of each vertical slice comprises:

  - finding a vertical slice header code;

  - starting at a left end of the vertical slice;

  - skipping decoding until a macro block counter value is equivalent to a left most position of the vertical slice;

  - decoding when the macro block counter value exceeds the left most position and until the macro block counter value reaches a right most position of the vertical slice;

  - stopping decoding when the macro block counter value reaches a right most position of the vertical slice; and

  - skipping decoding when the macro block counter value exceeds the right most position and until the macro block counter value reaches a right end of the vertical slice.

10. (Previously Presented) A machine-readable medium having executable instructions to cause a computer to perform a method comprising:

- receiving the video stream including I, P, and B frames;

- decoding only predetermined portions of each B frame of the video stream, the predetermined portions determined by display resolution; and

- scaling the only predetermined portions of each B frame, the scaling comprises vertical filtering.

11. (Original) The machine-readable medium of claim 10 wherein the predetermined portions comprises portions to be displayed.

12. (Original) The machine-readable medium of claim 10 further comprising:  
storing the decoded portions of B frame data; and  
fully decoding an I frame and a P frame of the video stream.
13. (Original) The machine-readable medium of claim 10 wherein decoding only predetermined portions of each B frame of the video stream comprises decoding the predetermined portions of each B frame by vertical slice.
14. (Original) The machine-readable medium of claim 13 wherein decoding the predetermined portions of each B frame by vertical slice comprises:  
determining picture size information including a left end, a left most position, a right most position, and a right end; and  
decoding predetermined portions of each vertical slice, wherein decoding predetermined portions of each vertical slice comprises:  
skipping a first portion between the left end and the left most position for the vertical slice; and  
decoding a second portion between the left most position and the right most position for the vertical slice; and  
skipping a third portion between the right most position and the right end.
15. (Original) A machine-readable medium having executable instructions to cause a computer to perform a method comprising:  
receiving the video stream and picture information;  
resetting a macro block counter; and  
decoding predetermined portions of the B frame by vertical slice, the predetermined portions determined by display resolution, wherein decoding the predetermined portions of each vertical slice comprises:  
finding a vertical slice header code;  
starting at a left end of the vertical slice;  
skipping decoding until a macro block counter value is equivalent to a left most position of the vertical slice;



decoding when the macro block counter value exceeds the left most position and until the macro block counter value reaches a right most position of the vertical slice;

stopping decoding when the macro block counter value reaches a right most position of the vertical slice; and

skipping decoding when the macro block counter value exceeds the right most position and until the macro block counter value reaches a right end of the vertical slice.

16. (Previously Presented) A video decoder comprising:

a variable length decoding unit to receive a video stream and decode symbols in the video stream, the variable length decoding unit including a skip judge to instruct units within the video decoder to skip decoding, and wherein only predetermined portions of a B frame of the video stream are decoded, the predetermined portions determined by display resolution; and

a picture layer decoding unit to receive at least one of information from the variable length decoding unit and information from a system controller.

17. (Previously Amended) The video decoder of claim 16 further comprising a macro block counter in the variable length decoding unit to count macro blocks in each vertical slice of the B frame.

18. (Original) The video decoder of claim 17 wherein the skip judge gives instructions to skip decoding by macro block.

19. (Previously Amended) The video decoder of claim 16 further comprising a scaling unit to perform vertical and horizontal filtering to generate a target frame size according to a scaling ratio provided by the picture layer decoding unit.

20. (Original) The video decoder of claim 16 further comprising a formatter to configure decoded data in a predetermined format.

21. (Previously Amended) The video decoder of claim 16 further comprising a reconstruction unit to receive information from the variable length and picture layer decoding unit, perform an inverse discrete cosine transform (IDCT) on the decoded portions of the B frame, and add an output of the IDCT with data in a spatially shifted location in an anchor frame as instructed by motion vector information.

22. (Previously Amended) The video decoder of claim 16 wherein the variable length decoding unit comprises:

- a symbol decoder to receive the video stream and decode symbols in the video stream;

- a picture layer syntax parser to determine information in the video stream higher than a macro block layer, the picture layer syntax parser passing the information to the picture layer decoding unit; and

- a macro block syntax parser to determined information at the macro block layer and below the macro block layer.

23. (Original) The video decoder of claim 16 wherein the predetermined portions of the B frame to be decoded include portions between a left most end and a right most end on each of a plurality of vertical slice layers of the B frame.

24. (Original) The video decoder of claim 16 wherein the video stream is an MPEG2 video stream.

25. (Previously Presented) A system to decode, convert, and format a video stream for display comprising:

- a demultiplexer to receive and extract information in a layer of the video stream, the video stream including I, P, and B frames;

- a video decoder to decode a video stream received from the demultiplexor, the video decoder decoding only predetermined portions of each B frame of the video stream, the predetermined portions determined by display resolution; and

a digital to analog converter to convert a decoded video signal from the video decoder to an analog signal to be displayed on a display device.

26. (Previously Amended) The system of claim 25 wherein the video decoder comprises:

a variable length decoding unit to receive a video stream and decode symbols in the stream, the variable length decoding unit including a skip judge to instruct units within the video decoder to skip decoding, and wherein only predetermined portions of a B frame of the video stream are decoded; and

a picture layer decoding unit to receive at least one of information from the variable length decoding unit and information from a system controller.

27. (Previously Amended) The system of claim 26 wherein the video decoder further comprises a macro block counter in the variable length decoding unit to count macro blocks in each vertical slice of the B frame.

28. (Original) The system of claim 27 wherein the skip judge gives instructions to skip decoding by macro block.

29. (Previously Amended) The system of claim 26 wherein the video decoder further comprises a scaling unit to perform vertical and horizontal filtering to generate a target frame size according to a scaling ratio provided by the picture layer decoding unit.

30. (Original) The system of claim 26 wherein the video decoder further comprises a formatter to configure decoded data in a predetermined format.

31. (Previously Amended) The system of claim 26 wherein the video decoder further comprises a reconstruction unit to receive information from the variable length and picture layer decoding unit, perform an inverse discrete cosine transform (IDCT) on the decoded portions of the B frame, and add an output of the IDCT with data in a spatially shifted location in an anchor frame as instructed by motion vector information.

32. (Previously Amended) The system of claim 26 wherein the variable length decoding unit comprises:

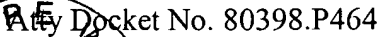
a symbol decoder to receive the video stream and decode symbols in the video stream;

a picture layer syntax parser to determine information in the video stream higher than a macro block layer, the picture layer syntax parser passing the information to the picture layer decoding unit; and

a macro block syntax parser to determined information at the macro block layer and below the macro block layer.

33. (Original) The system of claim 25 wherein the predetermined portions of the B frame to be decoded include portions between a left most end and a right most end on each of a plurality of vertical slice layers of the B frame.

34. (Original) The system of claim 25 the video stream is an MPEG2 video stream.



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

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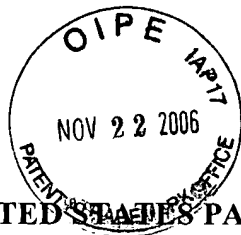
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P.O. Box 1450  
Alexandria, VA 22313-1450

**EVIDENCE APPENDIX FOR  
APPELLANT'S BRIEF UNDER 37 C.F.R. 41.37(a)**

NONE.



Atty Docket No. 80398.P464

*Patent*

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

|                            |   |              |               |
|----------------------------|---|--------------|---------------|
| In re Application of:      | ) | Examiner:    | Phillippe, G. |
|                            | ) |              |               |
| Tsukagoshi, et al.         | ) | Art Unit:    | 2621          |
|                            | ) |              |               |
| Application No. 10/021,228 | ) | Confirm. No: | 1136          |
|                            | ) |              |               |
| Filed: December 11, 2001   | ) |              |               |
|                            | ) |              |               |
| For: A VIDEO DECODER AND   | ) |              |               |
| METHOD FOR USING THE       | ) |              |               |
| SAME                       | ) |              |               |
|                            | ) |              |               |

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**RELATED PROCEEDINGS APPENDIX FOR  
APPELLANT'S BRIEF UNDER 37 C.F.R. 41.37(a)**

NONE.